

REMARKS

Claims 1-37 are pending.

Claims 15-37 are withdrawn from consideration.

Claims 1-14 stand rejected.

Claim 1 has been amended. Support for this amendment can be found throughout the specification and drawings, as originally filed.

The specification, at paragraphs [0001] and [0022], has been amended to include the serial number of a related copending U.S. patent application. The Applicant avers that no new matter has been introduced by virtue of these amendments.

35 USC §102(b) REJECTION

Claims 1, 4-6, 9, 11, 13 and 14 stand rejected under 35 U.S.C. §102(b) as being anticipated by Gitto (US 2002/0155348 A1).

The Applicant respectfully traverses the 35 U.S.C. §102(b) rejection of claims 1, 4-6, 9, 11, 13 and 14.

The law is clear that anticipation requires that a single prior art reference disclose each and every limitation of the claim sought to be rejected. 35 U.S.C. 102(b).

The law is also clear that a claim in dependent form shall be construed to incorporate all the limitations of the claim to which it refers. 35 U.S.C. 112, fourth paragraph.

In the interests of expediting prosecution of the instant application, and without admission that any amendment is required, the Applicant has amended claim 1 to recite, among other things, a battery case comprising: (1) a base portion having a bottom and

side walls forming an interior compartment for holding a battery cell and internal structural components; and (2) a cover portion engaging the side walls for enclosing the compartment, wherein the base portion and cover portion are formed of a flame retardant polymeric composition comprising a base polymer and a fire resistant additive, and wherein at least one of the base portion and the cover portion includes *an uncovered vent hole through which evolved gases are permitted to freely escape*.

Support for this amendment can be found in the specification at paragraph [0020] as well as other portions thereof, including the drawings. Paragraph [0020] is reproduced below for the Examiner's review:

[0020] In an exemplary embodiment of the present invention, as depicted in FIGS. 1-3, *the battery case 10 includes at least one vent hole 24 and/or 26 through which evolved gases can escape*. Upon exposure to high thermal conditions, the intumescent flame retardant polymeric material may release gases, which can create a pressure build-up within the interior compartment 18 enclosed by the battery case 10. *The one or more vent holes 24 and/or 26 in the battery case reduce that pressure build-up by allowing those gases to escape*. Advantageously, a plurality of vent holes 24 and/or 26 are distributed throughout the battery case 10 to *provide optimum venting*. More advantageously, a plurality of vent holes 24 is provided in the cover portion 20 of the battery case 10 to *allow the evolved gases to escape* from the top of the battery case 10. A gas-permeable membrane (not shown) may be provided in conjunction with the vent holes 24, 26 to *permit gases to escape* while preventing fluids and/or solid particles from escaping. As shown in FIG. 3, vent holes 26 may also be provided in the base portion 12, such as in the sidewalls 16 adjacent the cover portion 20. (Emphasis added).

Gitto does not teach any such structure as presently recited in claim 1, or the claims dependent therefrom.

More specifically, Gitto does not teach that either a base portion or a cover portion of his battery casing includes *an uncovered vent hole through which evolved gases are permitted to freely escape*.

Because claim 1 is allowable over Gitto for at least the reasons stated above, claims 4-6, 9, 11, 13 and 14, which depend from and further define claim 1, are likewise allowable.

Accordingly, the Applicant contends that the 35 U.S.C. §102(b) rejection of claims 1, 4-6, 9, 11, 13 and 14 has been overcome.

The Applicant also submits that Gitto does not render claims 1, 4-6, 9, 11, 13 and 14 obvious.

The standard for obviousness is that there must be some suggestion, either in the reference or in the relevant art, of how to modify what is disclosed to arrive at the claimed invention. In addition, "[s]omething in the prior art as a whole must suggest the desirability and, thus, the obviousness, of making" the modification to the art suggested by the Examiner. *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 1051, 5 U.S.P.Q.2d (BNA) 1434, 1438 (Fed. Cir.), cert. denied, 488 U.S. 825 (1988). Although the Examiner may suggest the teachings of a primary reference could be modified to arrive at the claimed subject matter, the modification is not obvious unless the prior art also suggests the desirability of such modification. *In re Laskowski*, 871 F.2d 115, 117, 10 U.S.P.Q.2d (BNA) 1397, 1398 (Fed. Cir.1989). There must be a teaching in the prior art for the proposed combination or modification to be proper. *In re Newell*, 891 F.2d 899, 13 U.S.P.Q.2d (BNA) 1248 (Fed. Cir. 1989). If the prior art fails to provide this necessary teaching, suggestion, or incentive supporting the Examiner's suggested

modification, the rejection based upon this suggested modification is error and must be reversed. *In re Bond*, 910 F.2d 831, 15 U.S.P.Q.2d (BNA) 1566 (Fed. Cir. 1990).

As previously noted, Gitto does not disclose or suggest that either a base portion or a cover portion of his battery casing includes *an uncovered vent hole through which evolved gases are permitted to freely escape*. The Examiner asserted that “the vent holes are covered by caps (334) that are removable for adding liquid to the battery and also allowing excess gases to escape (paragraph 0051).”

What Gitto actually discloses at paragraph [0051] is “FIG. 6 shows an embodiment of second battery 332 similar to the first battery except second battery 332 has *caps 334 that are removable for adding liquid to the battery*, such as a solution of sulfuric acid.” (Emphasis added). Thus, Gitto is completely silent with respect to providing vents for allowing gases to freely escape, that is, the gases can not escape without having to first remove any caps over the supposed vents. If the caps are fastened to the supposed vents, no venting can occur. One of the primary advantages of the claimed invention is that no intervention is required by the user of the battery case to accomplish venting of any gases generated inside the battery case. The claimed invention provides that the gases can freely flow out of the battery case through the vents without the adjustment and/or removal of any of the components of the battery case. Gitto teaches away from the claimed invention, in that Gitto specifically teaches the use of “sealed” battery casings, e.g., see paragraph [0052]. It is thus unclear how any evolved gases can freely escape through the supposed vents of Gitto if they are tightly covered by caps (presumably to prevent the escape of liquids, such as sulfuric acid, from the battery).

Thus, one of ordinary skill in the art would not look to Gitto for guidance on a battery case, as presently claimed.

Accordingly, the Applicant contends that Gitto does not render claims 1, 4-6, 9, 11, 13 and 14 obvious.

35 U.S.C. §103(a) REJECTION

Claims 2, 3, 5 and 7 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Gitto (US 2002/0155348 A1), as applied to claims 1, 4-6, 9, 11, 13 and 14, above, and in further view of Sakai et al. (US 5,180,767).

The Applicant respectfully traverses the 35 U.S.C. §103(a) rejection of claims 2, 3, 5 and 7.

As previously noted, Gitto does not render claim 1, as amended, obvious. The recitation of Sakai et al. does not cure the deficiencies in the disclosure of Gitto.

The Examiner correctly noted that Gitto “does not disclose wherein the base polymer comprises polyphenylene oxide and glass fiber, wherein the base polymer is a thermoset polymer selected from the group consisting of a polyurethane, rubber, phenolic and an epoxy, wherein the fire resistant additive includes intercalated graphite and wherein the fire resistant additive includes a chlorinated paraffin and chlorinated polyethylene.” Even assuming arguendo that Sakai et al. disclose these features as alleged by the Examiner, which the Applicant does not concede, Sakai et al. fails to disclose or suggest a battery case including *an uncovered vent hole through which evolved gases are permitted to freely escape.*

Thus, one of ordinary skill in the art would not look to Gitto and/or Sakai et al., either alone or in combination therewith, for guidance on a battery case, as presently claimed.

Because claim 1 is allowable over Gitto and/or Sakai et al., either alone or in combination therewith, for at least the reasons set forth above, claims 2, 3, 5 and 7, which depend from and further define claim 1, are likewise allowable.

Accordingly, the Applicant contends that the 35 U.S.C. §103(a) rejection of claims 2, 3, 5 and 7 has been overcome.

35 U.S.C. §103(a) REJECTION

Claims 8 and 10 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Gitto (US 2002/0155348 A1), as applied to claims 1, 4-6, 9, 11, 13 and 14 above.

The Applicants respectfully traverse the 35 U.S.C. §103(a) rejection of claims 8 and 10.

As previously noted, Gitto does not render claim 1, as amended, obvious.

The Examiner correctly noted that Gitto “does not disclose the density of the polyethylene and α -olefin-containing copolymer” or the “parts by weight of each component of the blended mixture.” The Applicant respectfully disagree with the Examiner’s position “that other properties of said material [i.e., the α -olefin-containing copolymer], such as molecular weight, are inherent, given that the α -olefin-containing materials disclosed by Gitto and the present application having similar properties such as highly crystalline isotactic and syndiotactic forms.” The Applicant also respectfully disagrees with the Examiner’s assertion that “it would have been within the skill of the

ordinary artisan to increase or decrease the amount of polymeric binder, nitrogenous gas-generating agent, water vapor generating agent, antioxidant, and reinforcing agent in order to improve the low smoke, flame retardant, mechanical, electrical, processability and heat seal properties of the battery case.”

Thus, one of ordinary skill in the art would not look to Gitto for guidance on a battery case, as presently claimed.

Because claim 1 is allowable over Gitto for at least the reasons set forth above, claims 8 and 10, which depend from and further define claim 1, are likewise allowable.

Accordingly, the Applicant contends that the 35 U.S.C. §103(a) rejection of claims 8 and 10 has been overcome.

35 U.S.C. §103(a) REJECTION

Claim 12 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Gitto (US 2002/0155348 A1), as applied to claims 1, 4-6, 9, 11, 13 and 14, above, and in further view of Abu-Isa et al. (US 5,834,535).

The Applicants respectfully traverse the 35 U.S.C. §103(a) rejection of claim 12.

As previously noted, Gitto does not render claim 1, as amended, obvious. The recitation of Abu-Isa et al. does not cure the deficiencies in the disclosure of Gitto.

The Examiner correctly noted that Gitto “does not disclose wherein the fire resistant additive includes a chlorinated paraffin and chlorinated polyethylene.” Even assuming arguendo that Abu-Isa et al. disclose these features as alleged by the Examiner, which the Applicant does not concede, Abu-Isa et al. fails to disclose or suggest a battery

case including *an uncovered vent hole through which evolved gases are permitted to freely escape*.

Thus, one of ordinary skill in the art would not look to Gitto and/or Abu-Isa et al., either alone or in combination therewith, for guidance on a battery case, as presently claimed.

Because claim 1 is allowable over Gitto and/or Abu-Isa et al., either alone or in combination therewith, for at least the reasons set forth above, claim 12, which depends from and further defines claim 1, is likewise allowable.

Accordingly, the Applicant contends that the 35 U.S.C. §103(a) rejection of claim 12 has been overcome.

DOUBLE PATENTING REJECTION

Claims 1-37 stand provisionally rejected on the ground of non-statutory obviousness-type double patenting as being unpatentable over claims 1-30 of copending Application No. 10/771,916.

The Applicants respectfully traverse the double patenting rejection of claims 1-37.

In the interests of expediting prosecution of the instant application, and without admission that any terminal disclaimer is required, the Applicant submits herewith a terminal disclaimer with respect to copending Application No. 10/771,916.

Accordingly, the Applicants contend that the double patenting rejection of claims 1-37 has been overcome.

DOUBLE PATENTING REJECTION

Claims 1-37 stand provisionally rejected on the ground of non-statutory obviousness-type double patenting as being unpatentable over claims 1-27 of copending Application No. 11/498,118.

The Applicants respectfully traverse the double patenting rejection of claims 1-37.

In the interests of expediting prosecution of the instant application, and without admission that any terminal disclaimer is required, the Applicant submits herewith a terminal disclaimer with respect to copending Application No. 11/498,118.

Accordingly, the Applicants contend that the double patenting rejection of claims 1-37 has been overcome.

CONCLUSION

In view of the foregoing, the Applicants respectfully request reconsideration and reexamination of the Application. The Applicants respectfully submit that each item raised by Examiner in the Office Action of February 9, 2007 has been successfully traversed, overcome or rendered moot by this response. The Applicant respectfully submits that each of the claims in this Application is in condition for allowance and such allowance is earnestly solicited.

The Examiner is invited to telephone the Applicant's undersigned attorney at (248) 723-0487 if any unresolved matters remain.

Any needed extension of time is hereby requested with the filing of this document.

The Commissioner is authorized to charge any additional fees or credit any overpayment to Deposit Account No. 08-2789.

Respectfully submitted,

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April 12, 2007

Date

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